

## REMARKS

Applicants have studied the Final Office Action of October 30, 2002 ("Office Action"). Additionally, Applicants appreciate the Examiner's comments in a telephone interview conducted April 23, 2003. In particular, an agreement was reached with respect to introducing a new limitation of "predefined known relationships between the concepts" to the "lexicon" element. Applicants have amended the claims in accordance therewith. Accordingly, it is respectfully submitted that the application, as amended, is in condition for allowance.

Claims 16-25, 27-62, 64, 65, 67, and 72 are pending in the present application. Claims 1, 26, 63, 66 and 68-71 have been canceled without prejudice or disclaimer. Claims 16, 17, 24, 32, 45, 53 and 67 have been amended. New claim 72 has been added. No new matter has been introduced. Consideration and allowance of the claims in view of the above amendments and the ensuing remarks are respectfully requested.

### **EXAMINER OBJECTION: 35 U.S.C. § 112**

The Examiner rejected claims 1, 35-38, 56-59, 63 and 66-71 under 35 U.S.C. § 112, first paragraph. Claims 1, 63, 66 and 68-71 have been canceled without prejudice. Claim 67 has been amended to overcome the Examiner's rejection. With respect to the Examiner's comments regarding claims 35 and 56 in particular, Applicants respectfully submit that these claims refer to the manual selection of the concepts to be used as a data item (e.g., at page 36, lines 10-12 of the Specification) and not a predetermination of the semantic space as suggested by the Examiner.

The Examiner rejected claims 24, 32, 45, 53 and 67-68 under 35 U.S.C. § 112, second paragraph. Claim 68 has been canceled without prejudice. Applicants respectfully submit that claims 24, 32, 45, 53 and 67, as amended, overcome the Examiner's rejection.

**CLAIM REJECTION: §102(e) – Hazlehurst et al.**

The Examiner rejected claims 16-34 and 39-55 as being anticipated by Hazlehurst et al. (U.S. Patent No. 6,289,353). Applicants respectfully submit that independent claim 16 has been amended in accordance with the Examiner's comments during the April 23, 2003 telephone interview. Additionally, independent claim 17 has been amended to recite a similar limitation. In particular, Hazlehurst does not disclose, teach, or suggest organizing concepts according to their meaning into a *lexicon of predefined known relationships between the concepts*, said lexicon defining elements of a semantic space, as recited in independent claims 16, as amended, and similarly in independent claims 17 and 67, both as amended. Claims 18-34 and 39-55 all depend, directly or indirectly, from independent claim 17, as amended; and therefore claims 18-34 and 39-55 distinguish over the above-cited reference for the reasons set forth above.

**CLAIM REJECTION: SECTION 103(a)**

The Examiner rejected claims 60-62, 64 and 65 under 35 U.S.C. § 103(a) as being obvious over Hazlehurst et al. (U.S. Patent No. 6,289,353) as applied to claims 16-34 and 39-55, and further in view of Eldering (U.S. Patent No. 6,298,348). Eldering does not disclose, teach, or suggest organizing concepts according to their meaning into a *lexicon of predefined known relationships between the concepts*, said lexicon

defining elements of a semantic space, as recited in independent claims 16, as amended, and similarly in independent claims 17 and 67, both as amended. Claims 60-62, 64, and 65 all depend, directly or indirectly, from independent claim 17, as amended, and therefore include all of the limitations recited therein. Accordingly, for the same reasons as set forth above with respect to independent claims 16, 17, and 67, all as amended, dependent claims 60-62, 64, and 65 distinguish over the Hazlehurst reference, in view of the Eldering reference.

The Examiner rejected claims 67 and 68 under 35 U.S.C. § 103(a) as being obvious over Hazlehurst et al. (U.S. Patent No. 6,289,353), in view of Vorhees ("Query Expansion Using Logical-Semantic Relations"), and in view of Eldering (U.S. Patent No. 6,298,348). Applicants respectfully submit that claim 68 has been canceled without prejudice and Examiner's rejection is therefore moot. The Vorhees reference does not disclose, teach, or suggest organizing concepts according to their meaning into a *lexicon of predefined known relationships between the concepts*, said lexicon defining elements of a semantic space, as recited in independent claims 16, as amended, and similarly in independent claims 17 and 67, both as amended. Additionally, Applicants respectfully submit that independent claim 67, as amended, is patentable over Hazlehurst et al., in view of Vorhees, and in view of Eldering for the same reasons as set forth above with respect to independent claims 16 and 17, both as amended. Therefore, Applicants respectfully submit that independent claim 67, as amended, and new claim 72, which directly depends from independent claim 67, as amended, are in condition for allowance.

The Examiner rejected claims 35-38 and 56-59 under 35 U.S.C. § 103(a) as

being obvious over Hazlehurst (U.S. Patent No. 6,289,353) as applied to claims 16-34 and 39-55, and further in view of Tengi ("Design and Implementation of WordNet Lexical Database and Searching Software"). The Tengi reference does not disclose, teach, or suggest organizing concepts according to their meaning into a *lexicon of predefined known relationships between the concepts*, said lexicon defining elements of a semantic space, as recited in independent claims 16, as amended, and similarly in independent claims 17 and 67, both as amended. Claims 35-38 and 56-59 all depend, directly or indirectly, from independent claim 17, as amended, and, therefore, include all of the limitations recited therein. Accordingly, for the same reasons as set forth above with respect to independent claims 16, 17, and 67, all as amended, dependent claims 35-38 and 56-59 distinguish over Hazlehurst et al., in view of Tengi.

#### **EXAMINER'S RESPONSE TO ARGUMENTS**

Applicants appreciate the Examiner's response to their previous arguments as well as the Examiner's time during the April 23, 2003 telephone interview. Applicants respectfully submit that all of the Examiner's rejections to the pending claims have been addressed and overcome. Accordingly, Applicants respectfully request early allowance of the pending claims.

#### **ADDITIONAL REFERENCES CITED BY EXAMINER**

Applicant has considered the additional references made of record and not relied upon by the Examiner.

#### **CONCLUSION**

In view of the foregoing, it is respectfully submitted that all claims of the present application are in condition for allowance. Entry of the amendment, and examination

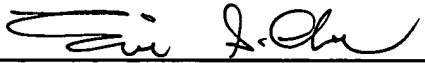
and consideration of the application, as amended, are respectfully requested, as is allowance of all claims at an early date.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles telephone number (213) 488-7100 to conduct a telephone interview with the Examiner to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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## APPENDIX

### **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

#### IN THE CLAIMS:

Please cancel claim 1, 26, 63, 66 and 68-71 without prejudice; amend claims 16, 17, 24, 32, 45, 53 and 67; and add new claim 72 as follows:

16. (Amended) A method comprising:

organizing concepts according to their meaning into a lexicon of predefined known relationships between the concepts, said lexicon defining elements of a semantic space;

receiving a first input associated with a first set of concepts from said lexicon, said first input representing a first location in the semantic space;

receiving a second input associated with a second set of concepts from said lexicon, said second input representing a second location in the semantic space; and

determining a semantic distance from the first location to the second location by combination of the semantic distance between each concept in the first set of concepts and each concept in the second set of concepts.

17. (Amended) A method [for searching a semantic space structured by a lexicon] comprising:

creating a lexicon of predefined known relationships between concepts that defines elements of a semantic space;

receiving an input associated with a first set of concepts from said lexicon

and representing a first location in said semantic space;

maintaining a target data set, wherein target data is associated with a second set of concepts from said lexicon that represents a second location in the semantic space;

determining a semantic distance from the first location in the semantic space to the second location in the semantic space for each target data, wherein said semantic distance is determined by combination of the relative closeness in meaning between each concept in the first set of concepts and each concept in the second set of concepts; and

presenting results of a search conducted on the target data set for target data close in meaning to the input based on the determined semantic distance.

24. (Amended) A method according to claim 23 wherein said labeled entity is one from the group of an image, video, sound file[,] or document [or other similar media].

32. (Amended) A method according to claim 18 wherein said data item is one from the group of an image, video, sound file[,] or document [or other similar media].

45. (Amended) A method according to claim 44 wherein said labeled entity is one from the group of an image, video, sound file[,] or document [or other similar media].

53. (Amended) A method according to claim 39 wherein said data item is one from the group of an image, video, sound file[,] or document [or other similar media].

67. (Amended) A method of generating a search result in response to a search request comprising:

organizing concepts according to their meaning into a lexicon of predefined known relationships between the concepts, said lexicon defining elements of a semantic space;

receiving [a] the search request and associating said search request with a first set of concepts from said lexicon [that represents a first location in the semantic space];

relating the search request to a larger set of search terms, wherein [added] terms in the larger set of search terms are close in meaning to the [original] search request based on [predetermined] semantic relationships defined by the lexicon; and

[assigning a monetary value to listings in a target data set;]

searching a target data set for elements generating a match with the larger set of search terms.[]; and

ordering identified target data elements from the target data set in accordance with the monetary value of the target data elements and the closeness in meaning between the original search terms and the expanded



search terms.]

Please add new claim 72.